# PROPOSED MANDATORY GREENHOUSE GAS REPORTING RULE









### **Department of Environmental Protection**

Division of Air Quality

Presented for

West Virginia Manufacturers Association West Virginia Chamber of Commerce

West Virginia Oil and Natural Gas Association



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# PROPOSED MANDATORY GREENHOUSE GAS REPORTING RULE

- The federal FY 2008 Omnibus Appropriations Act, signed December 26, 2007 required
  - EPA to publish a draft rule within 9 months
  - EPA to publish a final rule within 18 months
- The Act directed EPA to include emissions reporting from upstream production and downstream sources.

# PROPOSED MANDATORY GREENHOUSE GAS REPORTING RULE

- EPA's Proposed Rule and its Preamble appeared in the April 10, 2009 Federal Register
- The public comment period is open until June 9, 2009
  - The Preamble specifically sought comments on a wide range of issues



### EPA's rulemaking approach

- Start with anthropogenic sources in US GHG Inventory and IPCC Guidelines
- Review existing methodologies and reporting programs
  - Covered under CAA
  - Measureable,
  - reporting burden (number of reporters v extent of coverage)
- Develop reporting methodologies
- Created a cross-Agency WG to develop the rule

### **Source Categories Coverage**

Sector		Reporters
Electricity Generation		Power plants
Transportation		Vehicle and Engine Manufacturers
Industrial		All large industrial emitters, including those in the following industries:
	Metals	Iron and Steel, Aluminum, Magnesium, Ferroalloy, Zinc, and Lead
	Minerals	Cement, Lime, Glass, Silicon Carbide, Pulp and Paper
	Chemicals	HCFC-22, Ammonia, Nitric Acid, Adipic Acid, SF6 from Electrical Equipment, Hydrogen, Petrochemicals, Titanium Dioxide, Soda Ash, Phosphoric Acid, Electronics, Titanium Dioxide
	Oil and Gas	Components of oil and gas systems, Underground coal mining
Other		Landfills, Wastewater Treatment, Ethanol, Food Processing
Agriculture		Manure Management
Upstream Suppliers		Petroleum Refineries, Gas Processors, Natural Gas Distribution Companies, Active Coal Mines (aboveground, underground), Importers/Exporters, Industrial Gases (e.g., HFCs, N2O, PFCs, CO2)

### **Key Aspects of Proposal**

- Who would report
- Thresholds
- Reporting methodology
- Frequency
- Verification



#### Who Reports

- Current programs
  - Most mandatory reporting programs require facility-level or unit-level reporting
  - Most voluntary GHG programs have corporate-level reporting
- Who is appropriate reporter for mandatory program
  - Relying on corporate-level reporting would reduce usefulness of data for new policy or implementing current CAA programs

### **Who Reports - Continued**

- Frequent changes in corporate structure, ownership over time would make data from facilities harder to track
- A corporate-level threshold would bring in more, smaller facilities than if threshold was at facility level
- EPA proposed a hybrid
  - Primarily facility
  - Limited exceptions (e.g., fuel importers vehicle and engine manufacturers)

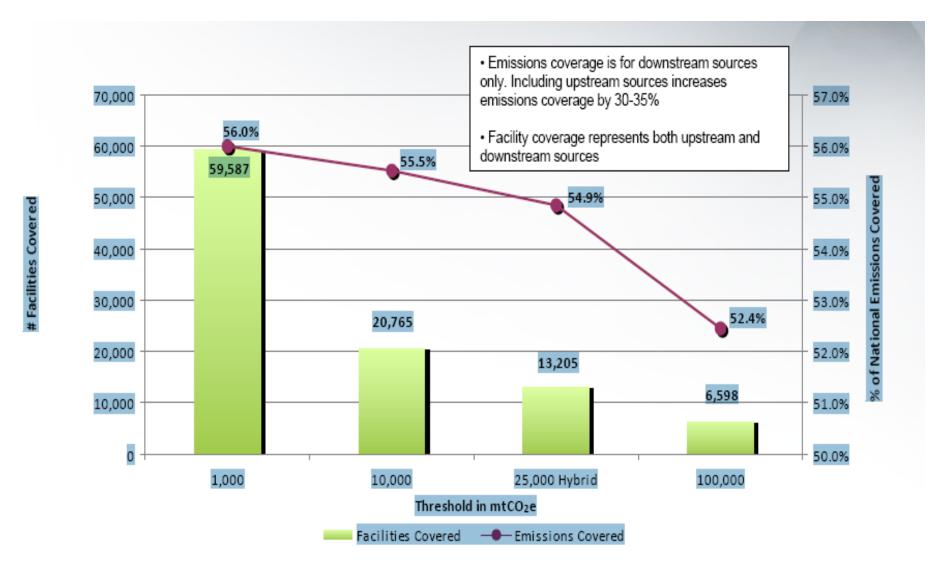
### **Reporting Threshold**

## Options

- CARB uses hybrid approach:
  - 25,000 metric tons CO<sub>2</sub>e for most categories; and
  - Production capacity for other categories (e.g., MWs or bbls)
- The EU uses capacity approach
- EPA proposed hybrid approach similar to CARB
  - Capacity-based where feasible and appropriate
  - 25,000 tons CO<sub>2</sub>e for other sources



#### **How EPA Decided on Threshold**



### **Proposed Methodologies**

- Hybrid of direct measurement, where available, and facility- specific calculation for other sources
  - Relatively high certainty of data, takes
     advantage of existing practices at facilities
  - Minimizes incremental cost of proposal
- Facilities would report directly to EPA

### **Frequency**

## Proposed

- Annually for new reporters
  - Except for those sources that are already reporting quarterly (e.g., Acid Rain Program)
- Data collection begins January 1, 2010 and
- First reports submitted to EPA March 31, 2011
  - The Preamble discusses other options in case
     EPA fails to publish the final rule in time



#### **Verification**

- EPA proposes to verifiy submittals
- GHG community stakeholders encourage third party verification

# Comparing Proposed EPA Rule with WV Greenhouse Gas Emissions Inventory Rule

### Applicability

- WV: all TV sources with emissions > 10,000 <u>short</u> tons CO<sub>2</sub>e
- EPA: all sources with emissions > 25,000 CO<sub>2</sub>e
   metric tons plus certain categories regardless of thresholds

### Emissions Calculation Methods

- WV: not specified
- EPA: Specified in each subpart
  - Subpart C PP
  - Nearly 90 pages of specifications in the FR



# Comparing Proposed EPA Rule with WV Greenhouse Gas Emissions Inventory Rule - Continued

### Pollutants

- WV: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF<sub>6</sub>)
- EPA: same as WV rule <u>PLUS</u> other fluorinated gases (e.g. nitrogen trifluoride and hydrofluorinated ethers [HFEs]).



# Comparing Proposed EPA Rule with WV Greenhouse Gas Emissions Inventory Rule - Continued

## Reporting

WV: to DAQ

EPA: directly to epa

### Verification

- WV: DAQ staff QA procedures
- EPA: bypasses state-level QA



### FAQ – Data Sharing with S&L

- Q. How would data be efficiently shared among existing state GHG programs and this new federal reporting program?
- A. EPA is proposing that <u>reporting entities would</u> <u>report directly to EPA</u>. In order to reduce the burden of reporting, EPA staff is working with The Climate Registry and the Exchange Network on a data exchange standard for GHG reporting. EPA anticipates that this coordination will reduce the burden of reporting for both reporters and governments.

#### **FAQ – Fuel Combustion**

- Q. Is there a simple way for facilities with stationary fuel combustion units to determine if they would be required to report?
- A. Yes. Combustion units with combined capacity of *less than 30 mmBtu/hr* with no other emission sources *do not have to report*.

  Stationary combustion units include among

others boilers, combustion units include among others boilers, combustion turbines, engines, incinerators, and process heaters.

EPA is seeking further comment on this strategy in the proposal.



### FAQ – Reporting Below Threshold

- Q. Are there some sectors where all entities would have to report regardless of whether they meet the 25,000 mtCO2e annual threshold?
- A. Yes. For <u>19 of the source categories</u>, all of the facilities that have that particular source category within their boundaries <u>would be subject</u> to the proposed rule.

These source categories include large manufacturing operations such as <u>petroleum refineries</u> and <u>cement production</u>. For more information on which source categories would be covered by this proposal see the General Provisions Information Sheet



### FAQ – Upstream Sources

- Q. Why are both downstream and upstream reporting required?
- A. EPA was required to include reporting of emissions resulting from upstream production and downstream sources, as appropriate, in order to maximize the coverage of emissions reported.

Rather than gathering data from hundreds or thousands of small facilities or individual vehicle owners, the *proposed rule includes upstream suppliers of industrial gases and fossil fuels, and manufacturers of new vehicles and engines.* 

### **FAQ – Differs from Inventory**

- Q. How is this reporting rule different from the Inventory of US GHG Emissions and Sinks report?
- A. The Inventory is a comprehensive <u>top-down</u> national assessment of national GHG emissions, providing full coverage of <u>total annual U.S. GHG emissions</u>, as is required for reporting to the UN. This inventory uses national energy data and other national statistics. These national emissions estimates are <u>not broken down at the geographic or facility level.</u>

The MRR focuses on <u>bottom-up data</u> and <u>individual</u> <u>sources</u> above appropriate thresholds. While the rule would provide more specific data, it would not provide full coverage of total annual U.S. GHG emissions, as is required by the UNFCCC.



#### For more information

- Preamble and proposed regulatory text available at: <u>www.regulations.gov</u>
- Instructions for submitting written comments: www.regulations.gov
- Additional information: <u>www.epa.gov/climatechange/emissions/ghgrule</u> <u>making.html</u>
- Hotline: 1-877-GHG-1188
- Email: GHGMRR@epa.gov

